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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,364	09/30/2003	Johannes Lauterbach	09700.0062	3223

22852 7590 02/26/2007  
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WASHINGTON, DC 20001-4413

EXAMINER
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AUGUSTINE, NICHOLAS

ART UNIT	PAPER NUMBER
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2179

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/676,364

Applicant(s)

LAUTERBACH ET AL.

Examiner

Nicholas Augustine

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C. §101 for method claims and claims that recite a judicial exception (software) is that the claimed invention recite a practical application. Practical application can be provided by a physical transformation or a useful, concrete and tangible result. No physical transformation is recited and additionally, there is no final result only the mention of software classes. Also note the definition of an "information carrier" defined in the specification (par.107) wherein an information carrier is defined to be a propagated signal. Signals carrying instructions or other functional descriptive material or a computer program per se is not included in one of the statutory categories of invention, more information about this matter is covered in the Annex IV of the Interim Guidelines for Subject matter Eligibility. Limiting the types of mediums that can be used will meet the guidelines (e.g. CD-ROM, DVD-ROM, HDD, etc... while excluding the possibility of the use of signals, waves and the like). The following link on the World Wide Web is for the United States Patent And Trademark office (USPTO) policy on 35 U.S.C. §101

[http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf)

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by the Template Software product line.

The **Template** Software product line contains:

The SNAP programming language

The WorkFlow Template

The Web Component

These three-layered products work together.

The documentation sets for the products contains the following manuals.

**SNAP** released June 1997

SNAP Language Reference (Referred to as **REF** - Not used in this Office Action)

Using the SNAP Language (Referred to as **LANG** - Not used in this Office Action)

Using the SNAP Communication Component (Referred to as **COM**- Not used  
in this Office Action)

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Using the SNAP Graphic User Interface Component (Referred to as **GUI**

Not used in this Office Action)

Getting Started with SNAP (Referred to as **START** Not used in this Office Action)

Using the SNAP Display Editors (Referred to as **DISP** - Not used in this Office

Action)

SNAP Class Library Reference (Referred to as **CLASS** - Not used in this Office

Action)

Using the SNAP External Application Software Component (**EXT**- Not used in

this Office Action)

Using the SNAP Development Environment (Referred to as **SNAP** )

SNAP Module Library Reference (Referred to as **MODU** -Not used in this

Office Action)

Using the SNAP Permanent Storage Component (Referred to as **PERM**-

Not used in this Office Action )

### **Workflow** released September 1997

Developing a WFT Workflow System (Referred to as **WFT** )

Using the WFT Development Environment (Referred to as **ENV**)

WFT Library Reference (Referred to as **WFTLIB** - Not used in this Office Action)

### **Web Component**

Using the Web Component (Referred to as **WEB**- Not used in this Office Action)

**Training Guides**

SNAP Application Developer's Training Course (Referred to as **TRAINS** -  
Modules 1 and 10 provided- Not used in this Office Action)

Workflow Template Training Course (Referred to as TRAINW - Section A)

Since, these products work together they constitute a single reference and can be used as the basis for a rejection based on anticipated by a product offering. Furthermore, with the 1997 press release announcing version 8.0 these considered prior art under *In re Epstein* 31 USPQ2d 1817 (decided August 17, 1994) with a 1997 release date despite the 1998 copyright date.

**As for independent claim 1**, Template teaches a computer program product, tangibly embodied in an information carrier, for developing applications, the computer program product being operable to cause data processing apparatus to interact with data conforming to a data model, the data model comprising (SNAP, page 4-2): a component class (SNAP, page 4-4); a model class associated with the component class (SNAP, page 4-4), *the model class including a model-class class and a model relation class, the model-class class including a model class attribute class, and the model relation class including a model relation role class* (SNAP, pages 4-10 – 4-14); a controller class associated with the component class, *the controller class including a context node class having a context attribute class, the context node class being associated with the*

*model-class class and the model relation class, and the context attribute class being associated with the model class attribute class (SNAP, pages 4-10 through 4-14); and a view class associated with the component class, the view class including a user interface element class having a binding with either the context node class or the context attribute class (SNAP, pages 4-10 – 4-14). (ENV, chapter 3)*

As for dependent claim 2, Template teaches the computer program product of claim 1, wherein the data model further comprises a context element class that is a super class of the context node class and the context attribute class (SNAP, pages 3-21 and 3-22).

As for dependent claim 3, Template teaches the computer program product of claim 2, wherein the binding is associated with one of the context node class and the context attribute class using the context element class (SNAP, page 3-15).

As for dependent claim 4, Template teaches the computer program product of claim 1, wherein the association between the component class and the view class is an aggregation (SNAP, page 3-21 and 4-10 through 4-14).

As for dependent claim 5, Template teaches the computer program product of claim 1, wherein the association between the component and the controller is an aggregation (SNAP, pages 3-21 and 4-10 through 4-14).

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As for dependent claims 6 and 17, Template teaches the computer program product of claim 1 and corresponding system of claim 16, wherein the data model further includes an indicator that is used to determine a file border (SNAP, page 8-21).

As for dependent claims 7 and 18, Template teaches the computer program product of claim 1 and corresponding system of claim 16, wherein the data model further includes an indicator used to implement a platform-specific feature (SNAP, Chapter 8, page 8-26-UNIX and pages 2-4 through 2-5).

As for dependent claims 8 and 19, Template teaches the computer program product of claim 1 and corresponding system of claim 16, wherein the data model further includes an indicator representing translatable text (SNAP, page 6-10, Class Definition files (CD) more specific references to CD files throughout the reference).

As for dependent claims 9 and 20, Template teaches the computer program product of claim 1 and corresponding system of claim 16, wherein at least one of the associations in the data model is an aggregation, and wherein the data model further includes an indicator representing whether the aggregation is ordered (SNAP, Chapter 3, Object Model Editor, see pages 3-6 inheritance lines and page 3-9).

As for dependent claims 10 and 21, Template teaches the computer program product of claim 1 and corresponding system of claim 16, wherein the data model further includes



an indicator representing a singular name (SNAP, page 3-11, New class – class name)

As for dependent claims 11 and 22, Template teaches the computer program product of claim 1 and corresponding system of claim 16, wherein the data model further includes an indicator representing whether an attribute is null able (SNAP, page 3-40, Attributes – Default).

As for dependent claim 12, Template teaches the computer program product of claim 1, wherein the data model further includes an unassociated class defining enumeration attributes representing allowed values of a specific enumeration type (SNAP, page 3-40, Attributes).

**As for independent claim 13**, Template teaches a computer program product, tangibly embodied in an information carrier, for developing applications, the computer program product being operable to cause data processing apparatus to (SNAP, page 4-2):

*generate an instance of a model, the instance of the model including a model class instance and a model relation instance, the model class instance including a model class attribute instance, and the model relation instance including a model relation role instance; generate an instance of a controller, the instance of the controller including a context node instance having a context attribute instance; generate an instance of a view, the instance of the view including a user interface element instance; associate the context node instance with the model class instance; associate the context node*

*instance with the model relation instance; associate the context attribute instance with the model class attribute instance; and associate the user interface element instance with one of the context node instance and the context attribute instance (SNAP, pages 4-7 through 4-9).*

As for dependent claim 14, Template teaches the computer program product of claim 13, wherein the association between the controller instance and the context node instance is an aggregation (SNAP, page 3-21 and 4-10 through 4-14).

As for dependent claim 15, Template teaches the computer program product of claim 13, wherein the association between the model instance and the model class instance is an aggregation (SNAP, page 3-21 and 4-10 through 4-14).

**As for independent claim 16,** Template teaches a system for developing applications, the system comprising a repository including data conforming to a data model, the data model comprising (SNAP, page 4-2 and WFT, pages 2-2 through 2-3): *a component class; a model class associated with the component class, the model class including a model-class class and a model relation class, the model-class class including a model class attribute class and the model relation class including a model relation role class; a controller class associated with the component class, the controller class including a context node class having a context attribute class, the context node class being associated with the model-class class and the model relation class and the context*

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*attribute class being associated with the model class attribute class; and a view class associated with the component class, the view class including a user interface element class having a binding with either the context node class and the context attribute class.* (note the analysis of claims 1-3 above and WFT, chapter 2-4, 6-7 and pages 2-4 and 4-3).

**It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006,1009, 158 USPQ 275, 277 (CCPA 1968)).**

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 7096224 B2	Mechanism for mapping XML schemas to object-relational database systems
US 6947945 B1	Using an XML query language to publish relational data as XML

US 6934712 B2	Tagging XML query results over relational DBMSs
US 6581062 B1	Method and apparatus for storing semi-structured data in a structured manner
US 20040181783 A1	Transformation apparatus, transformation method, transformation programs, and computer readable recording medium having the transformation program stored therein

### ***Inquires***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Augustine whose telephone number is 571-270-1056. The examiner can normally be reached on Monday - Friday: 7:30- 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



N. Augustine  
February 12, 2007

Nicholas Augustine  
Examiner  
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